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Nota di contenuto	Part 1. Introduction -- 1. Bioformulations for Plant Growth Promotion and Combating Phytopathogens: A Sustainable Approach -- 2. Formulation Technology of Biocontrol Agents - Present Status and Future Prospects -- 3. Beneficial Microorganisms: Current Challenge to Increase Crop Performance -- 4. The Production and Potential of Biofertilizers to Improve Crop Yields -- 5. Effect of Bioinoculants on the Quality of Crops -- Part 2. Diverse Applications -- 6. The Biological Potential of Arbuscular Mycorrhizal Fungi -- 7. The Use of Arbuscular Mycorrhiza Fungi in Combination with Trichoderma spp. in Sustainable Agriculture -- 8. Bioformulations of Novel Indigenous Rhizobacterial Strains for Managing Soilborne Pathogens -- 9. Bio-Based and Reduced-Risk Strategies for the Management of Phytophthora Blight and Root Rot of Pepper -- 10. Formulation of Pochonia chlamydosporia for Plant and Nematode Management -- 11. Improvement of Crop Protection and Yield in Hostile Agroecological Conditions with PGPR-- Based Biofertilizer Formulations -- 12. Use of Indigenous Cyanobacteria for Sustainable Improvement of Biogeochemical and Physical Fertility of Marginal Soils in Semiarid Tropics -- Part 3. Present Scenario and Future -- 13. The Contribution of Secondary Metabolites

in the Success of Bioformulations -- 14. Encapsulation Techniques for Plant Growth Promoting Rhizobacteria -- 15. An Overview of Globally Available Bio-Formulations -- 16. Regulation of Biopesticides: Global Concerns and Policies.

Sommario/riassunto

More than a century has passed since the first bioformulations were introduced to the market. But there is still much to be done, explored and developed. Though bioformulations offer green alternatives and are important for sustainable agriculture, they make up only a small fraction of the total additions used to enhance crop yields or protect them from pests. There is a great need to develop bioformulations that can promote confidence among end users; accordingly, it is imperative that bioformulations to replace chemicals be reliable and overcome the shortcomings of the past. Bioformulations: for Sustainable Agriculture discusses all the issues related to the current limitations and future development of bioformulations. It examines in detail those bioformulations that include biofertilizers and biopesticides (also commonly known as bioinoculants), presenting a global picture of their development. Further chapters address diverse microbes that are already being or could be used as bioformulations. The book also discusses the techniques, tools and other additions required to establish bioformulations as trustworthy and global solutions. It assesses the types of bioformulations currently available on the market, while also considering the future roles of bioformulations, including the reclamation of marginal and polluted soils. Further, it discusses the current legislation and much-needed amendments. Overall the book provides a comprehensive outlook on the status quo of bioformulations and the future approaches needed to improve them and achieve sustainable agriculture and food security without sacrificing the quality of soils. This will be extremely important in offering chemical-free foods and a better future for generations to come.
